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10/811,304

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Sami Jutila

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EXAMINER

SAMUEL, DEWANDA A

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/811,304	<b>Applicant(s)</b> JUTILA ET AL.	
	<b>Examiner</b> DEWANDA SAMUEL	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. **Claims 1-5, 8, 10-13, 18-20, 22-24 and 25** are objected to because of the following informalities: the acronym "SND" . Appropriate correction is required.
2. **Claims 1** is objected to because of the following informalities: the phrase " comprising the steps" the phrase is missing a ":" and a "," is improperly placed after the term "SND" . Appropriate correction is required.
3. **Claims 10, 18 and 22** are objected to because of the following informalities: the preamble is incorporated into the body of the claim, a transition term need to be implemented. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. **Claim 2** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**With regard to claim 2,** the phrase " if yes" anticipates a question of if no known SND code what is the procedure then?

***Claim Rejections - 35 USC § 103***

a. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 1, 2,4,6,7,8 9,11,12,14-17,19,21 and 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johannesson et al. (US Patent 7,236,784) in view Coles (PG PUB 2006/0217153).

**With regard to claims 1,10, 18 and 22**, method for selecting a service or service provider in a shared network configuration which includes at least one terminal, at least one access network, and at least two alternatively selectable services or service providers accessible via the access network, comprising the step the access network broadcasts, to the terminal, a shared network domain, SND, code which indicates that at least two services or service providers are accessible via the access network, (**Johannesson et al. discloses having a methods of ands a system for selecting a PLMN network sharing , see title**). Joannesson et al. further discloses architecture 30 for network sharing in a radio access network portion 31 interpreted as a “access network” a

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**plurality of PLMNs interpreted as a “alternately selectable services or service providers”. In addition, a RAN portion 31 transmit a broadcast such as information related to a plurality of PLMNs, the broadcast information includes numerical identification information corresponds to an operator serving a particular PLMN, see col. Lines ); the broadcast SND code is changed only when there is a change in available services or service providers accessible via the access network, (Johanesson et al. discloses having a PLMN selection 40 whereby having a process of selecting a PLMN which includes a PLMN code, see col. Lines ). The PLMN code change when the available PLMNs update ); and the terminal or the access network or another network element selects an available service or service provider, (see col. , the MS selects an available PLMN).**

However, Johanesson et al. does not disclose the terminal checks whether SND code changes, and, when detecting that SND code has changed, checks whether the terminal contains or has access to information regarding available services or service providers associated to the changed SND code,(Coles et al. discloses having method and system for selecting a mobile communication network, see title). Cole et al. further discloses having an mobile terminal interpreted as a “terminal” which includes a SIM whereby storing a list of preferred public land mobile networks (PLMN) which is associated a code (e.g. MCC and MNC code) interpreted as a “SND code” , see page 1 para[0002]-[0007]). Coles et al. discloses applet

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**detecting a refreshed PLMN list interpreted as “ SND code change”. In addition, Coles et al. discloses the mobile terminal would read the PLMN list as updated to find a suitable network, see page 3 para[0054]).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement a applet as taught by Coles et al. into Johannessson et al. system for determining PLMN change whereby providing efficient roaming capabilities.

**With regard to claim 2,** in combination Johannesson et al. and Coles et al. teaches the methods recited in claim 1. wherein the terminal, when detecting that the SND code has changed from the previous code to a new code, checks whether thing e new SND code is already known to it, and, if yes, checks the services or service providers available in the present environment in which the new SND code is broadcast, wherein the terminal executes these checks by accessing a memory storing a list of SND codes and associated services or service providers, **(see col. the MS access a PLMN list which stores PLMN with PLMN codes)**

**With regards to claim 4,** in combination Johannesson et al. and Coles et al. teaches the methods recited in claim 1. wherein the same SND code is broadcast for one or several location areas, **see col. PLMN codes interpreted as a "SNDS codes")**.

**With regard to claim 6** , in combination Johannesson et al. and Coles et al. teaches the methods recited in claim 1. wherein the service providers are operators, **(see col. 4 lines , PLMN operators).**

**With regards to claim 7** , in combination Johannesson et al. and Coles et al. teaches the methods recited in claim 1. wherein the services are mobile services, **(see col. 4 lines , mobile communication services).**

**With regards to claim 8** , Johannesson et al teaches the methods recited in claim 1. wherein the access network broadcasts, in addition to the SND code, an information element indicating that the access network is a shared radio access network which provides access to at least two selectable services or service providers, **(Johannesson et al. discloses having a radio access network portion 31 broadcasting information related to a plurality of PLMNs 34,36 and 38 such as numerical identification information corresponding to an operator serving a particular PLMN interpreted as “at least two selectable services or service providers” , see col. 5 lines 47-67).**

**With regards to claim 9** , in combination Johannesson et al. and Cole et al. teaches the methods recited in claim 8. wherein the terminal checks whether or not the access network broadcasts the information element, and, when detecting that the access network broadcasts the information element, accesses

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its memory for finding the available selectable services or service providers, (**see col. 3 lines 29-67, the mobile station contains a SIM for subscriber - related information. Also, the MS receives a PLMN list interpreted as " available selectable service or service providers"**).

**With regards to claim 11**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 10. wherein the terminal includes a memory storing a list of SND codes and associated services or service providers, (**see col. 3 lines 29-67, MS contains a SIM which stores subscriber information and ROM** ).

**With regards to claim 12**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 10. wherein the access network is configured to broadcast the same SND code for one or several location areas, Las, (**see col. 5 lines 6-67, a RAN portion 31 broadcast PLMNs which contains PLMN code interpreted as a" SND code". Also, the PLMN is a location area whereby a particular PLMN operator provides mobile communication service, see col. 4 lines 5-10**).

**With regards to claim 14**, , in combination Johannesson et al. and Coles et al. teaches the system recited in claim 10. wherein the service providers are operators, , (**see col. 4 lines , PLMN operators**).



**With regards to claim 15**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 10. wherein the services are mobile services, **(see col. 4 lines , mobile communication services)**.

**With regards to claim 16**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 10. wherein the access network is configured to broadcast, in addition to the SND code, an information element indicating that the access network is a shared radio access network which provides access to at least two selectable services or service providers, **(Johannesson et al. discloses having a radio access network portion 31 broadcasting information related to a plurality of PLMNs 34,36 and 38 such as numerical identification information corresponding to an operator serving a particular PLMN interpreted as “at least two selectable services or service providers” , see col. 5 lines 47-67)**.

**With regards to claim 17**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 16. wherein the terminal is configured to check whether or not the access network broadcasts the information element, and, when detecting that the access network broadcasts the information element, to access its memory for finding the available selectable services or service providers, **( see col. 3 lines 29-67, the mobile station contains a SIM for subscriber -related information. Also, the MS receives a PLMN list interpreted as " available selectable service or service providers")**.

**With regards to claim 19**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 18. including a memory storing a list of SND codes and associated services or service providers, ( **see col. 3 lines 29-67, MS contains a SIM which stores subscriber information and ROM** ).

**With regards to claim 21**, in combination Johannesson et al. and Coles et al. teaches the system recited in claim 18. wherein the terminal is configured to check whether or not the access network broadcasts an information element indicating that the access network is a shared radio access network which provides access to at least two selectable services or service providers, and, when detecting that the access network broadcasts the information element, to access its memory for finding the available selectable services or service providers, ( **see col. 3 lines 29-67, the mobile station contains a SIM for subscriber -related information. Also, the MS receives a PLMN list interpreted as " available selectable service or service providers"** ).

**With regards to claim 23**, in combination Johannesson et al. and Coles et al. teaches the access network recited in claim 22. which is configured to select an available service or service provider, ( **see col. selects an available PLMN interpreted as "available service or service provider"** ).

**With regards to claim 24** , in combination Johannesson et al. and Coles et al. teaches the access network recited in claim 22. wherein the access network is configured to broadcast the same SND code for one or several location areas, Las, ( **see col. 5 lines 6-67, a RAN portion 31 broadcast PLMNs which contains PLMN code interpreted as a" SND code". Also, the PLMN is a location area whereby a particular PLMN operator provides mobile communication service, see col. 4 lines 5-10).**

**With regards to claim 25**, in combination Johannesson et al. and Coles et al. teaches the access network recited in claim 22. wherein the access network is configured to broadcast, in addition to the SND code, an information element indicating that the access network is a shared radio access network which provides access to at least two selectable services or service providers, , **(Johannesson et al. discloses having a radio acces network portion 31 broadcasting information related to a plurality of PLMNs 34,36 and 38 such as numerical identification information corresponding to an operator serving a particular PLMN interpreted as “at least two selectable services or service providers” , see col. 5 lines 47-67).**

**6. Claims 3,5, 13 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johannesson et al. (US Patent 7,236,784) in view Coles (PG

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PUB 2006/0217153) as applied to claim 1 above, and further in view of Bourdeaut et al. (EPO 1353521).

**With regards to claim 3**, in combination Johannesson et al. and Coles et al. teaches the methods recited in claim 1. However, Johannesson et al. does not explicitly disclose the terminal detects that the new SND code received by the terminal is not known to the terminal, the terminal or the access network or another network element detects services or service providers associated to the new SND code by receiving broadcast or dedicated downlink information which indicates the services or service providers associated to the new SND code, (**Bourdeaut et al. discloses having a cell re-selection technique whereby a network broadcasting of PLMN-ids interpreted as "SND code broadcast" and a list of Equivalent PLMNs already present interpreted as "stored SND code" in a MS (e.g. mobile station), see col. 4 para[ 0029]-[0030]).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement a cell reselection technique as taught by Boureaut et al. into the modified system of Johannesson et al. determining PLMN changes whereby providing efficient roaming capabilities.

**With regards to claim 5**, Johannesson et al. and Coles et al. teaches the method recited in claim 1. wherein the terminal stores the SND code broadcast in the present access network or location area of the terminal in a memory,

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**(Johannesson et al. discloses having a MS 16 storing PLMN list which is associated with PLMN code see col. 5 lines 47-67).**

However, Johannesson et al. does not disclose changing from the present access network or location area to a new access network or location area compares the stored SND code with the SND code broadcast in the new access network or new location area, ( **Bourdeaut et al. discloses having a cell re-selection technique whereby a network broadcasting of PLMN-ids interpreted as "SND code broadcast" and a list of Equivalent PLMNs already present interpreted as "stored SND code" in a MS (e.g. mobile station), see col. 4 para[ 0029]-[0030]).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement a cell reselection technique as taught by Boureaut et al. into the modified system of Johannesson et al. determining PLMN changes whereby providing efficient roaming capabilities.

**With regard to claim 13**, the system claim is interpreted and rejected on the same grounds set forth in method claim 5.

**With regard to claim 20**, the system claim is interpreted and rejected on the same grounds set forth in method claim 5.

***Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gupta et al. ( US Patent 6,567,667)

Stumpert et al. ( PG Pub 2004/0157600)

Gopikanth ( PG PUB 2003/0129971)

Kuchibhotla et al. ( PG PUB 2005/0075129)

Hogan ( PG PUB 2002/0111180)

Ronneke et al. ( PG PUB 2006/0193289)

Johannesson et al. ( PG PUB 2002/0119774)

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEWANDA SAMUEL whose telephone number is (571)270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application

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may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/

Supervisory Patent Examiner,

Art Unit 2616

/DeWanda Samuel/

Examiner, Art Unit 2416

10/21/2008